

VANMOOF

# S3 & X3

User manual



# Table of contents

## 1

### Build your bike

The toolbox	p.5
Take the bike out of the box	p.7
Get your toolbox ready	p.7
Adjust the stem	p.8
Wheel position	p.8
Brake disc covers	p.10
Brake disc alignment	p.11
Wheel alignment	p.12
Connect the motor cable	p.12
Attach the pedals	p.14
Check your handlebar	p.15

## 2

### The first ride

Matrix Display	p.17
Inflate your tires	p.18
Activating your Electrified	p.18
Handlebar buttons	p.19
Locking your bike	p.20
Unlocking when connected	p.20
Unlocking when not connected	p.21
Power assist level	p.22
Controlling the lights	p.23
Power and reset	p.23
Charging	p.24

## 3

### Find your fit

Saddle adjustment	p.26
Adjusting the handlebar height	p.28

## 4

### Love your bike

Bike basics	p.31
Chainguard and cleaning	p.32
Screw connections	p.32
Replacing parts	p.33
Warranty	p.34
Warnings	p.35

1

# Build your bike

---

We know you can't wait to get riding  
– this won't take long, promise.

---

The toolbox

Take the bike out of the box

Get your toolbox ready

Adjust the stem

Wheel position

Brake disc covers

Brake disk alignment

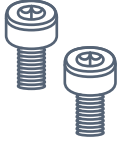
Wheel alignment

Connect the motor cable

Attach the pedals

Check your handlebar

## The toolbox



Cable cover bolts 2x



Anti-theft nut 2x



Anti-theft nut tool



Anti-theft torx key



Washers 2x



Anti-theft wrench



Handlebar spacers



Allen key #3, #5 & #6



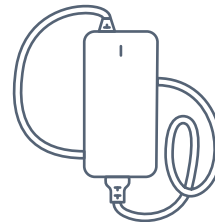
Cable cover



Tire pump



Chain lubricant



Charger

## BUILD YOUR BIKE

### VanMoof X3



### VanMoof S3

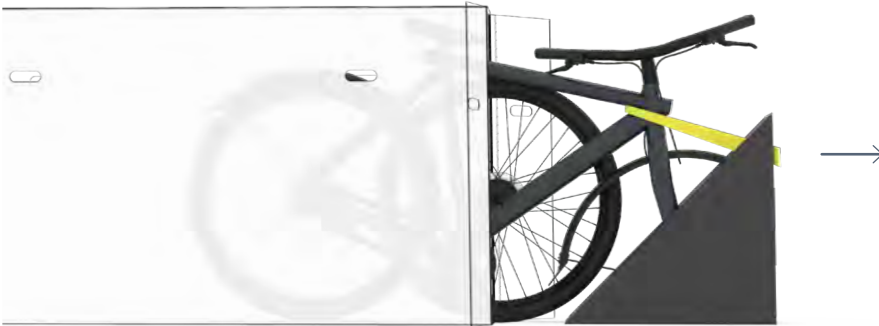


## BUILD YOUR BIKE

### 1. Take the bike out of the box

**1.1** To take the bike out of the box, gently pull the yellow strap.

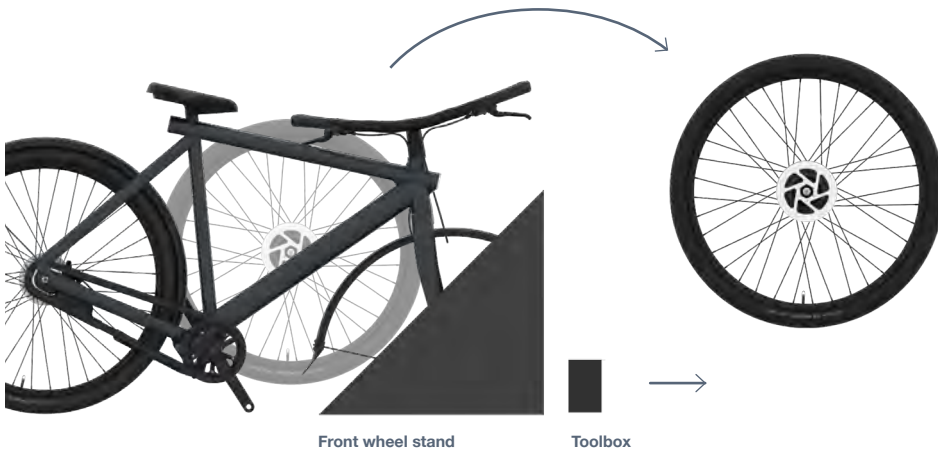
**1.2** Remove (and recycle) all protective packaging. Squeeze the tab on the cable ties to remove them without cutting – you can reuse them later.



### 2. Get your toolbox ready

**2.1** Take the toolbox out of the triangular front wheel stand – you'll find it at the front side of the stand.

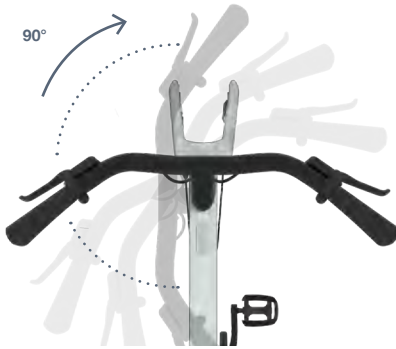
**2.2** Make sure you detach the wheel from the bike frame.



## BUILD YOUR BIKE

### 3. Adjust the stem

**3.1** Rotate the stem 90° clockwise so it's in line with the front fender.



**3.2** Now tighten the two bolts using the Allen key #5, making sure the stem stays in line with the front wheel.



#### Note

See page 28 to learn how to adjust the handlebar.

### 4. Wheel position

**4.1** Take the bike out of the front wheel stand and place it on the floor.

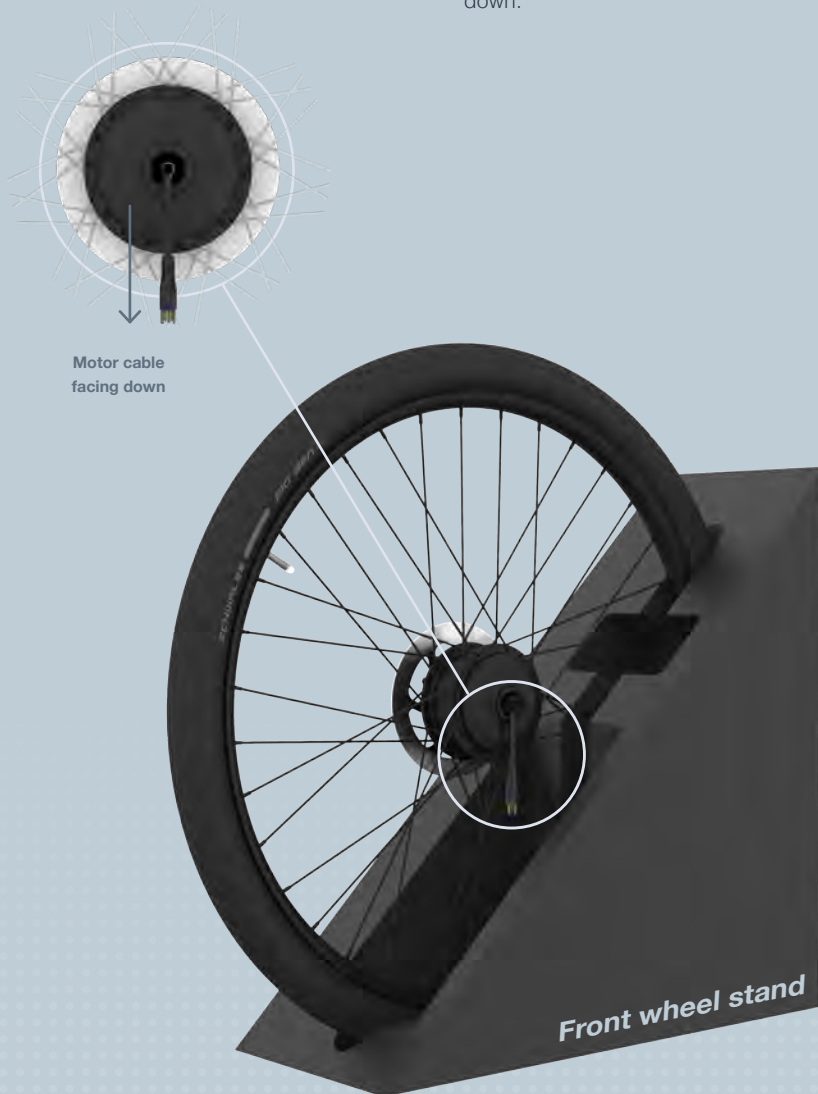




## BUILD YOUR BIKE

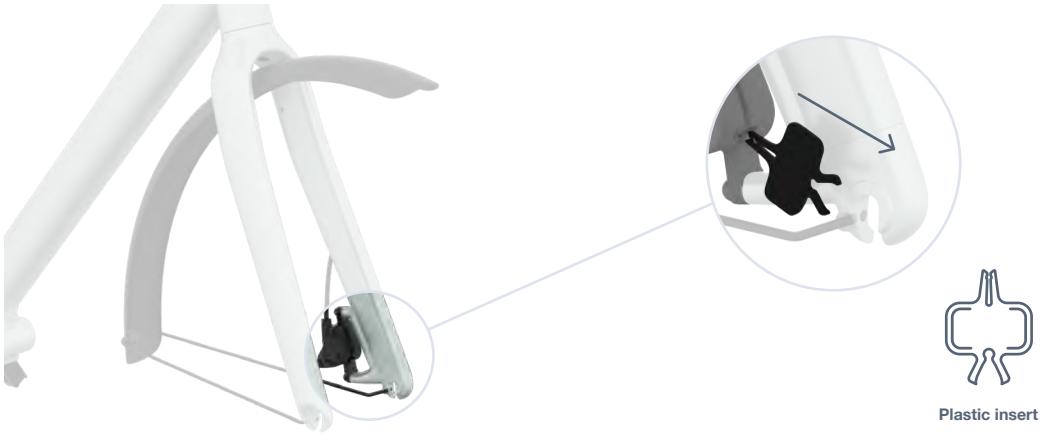
- 4.2 Put the front wheel in the front wheel stand.

- 4.3 Looking down from a riders position, the motor cable attached to the wheel should be on the right side and facing down.



## 5. Brake disc cover

- 5.1** Remove the plastic insert from the brake calliper. Make sure you don't squeeze the brake levers while doing this.

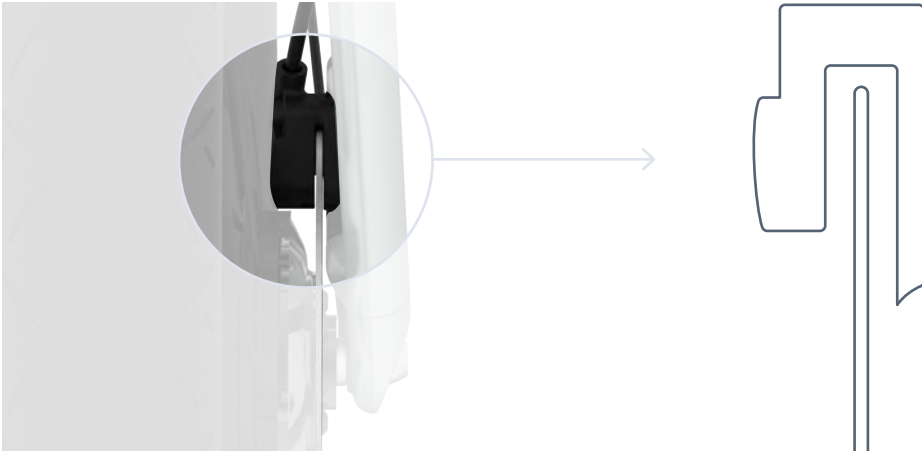


- 5.2** Carefully lift up the bike and guide the front fork onto the wheel.

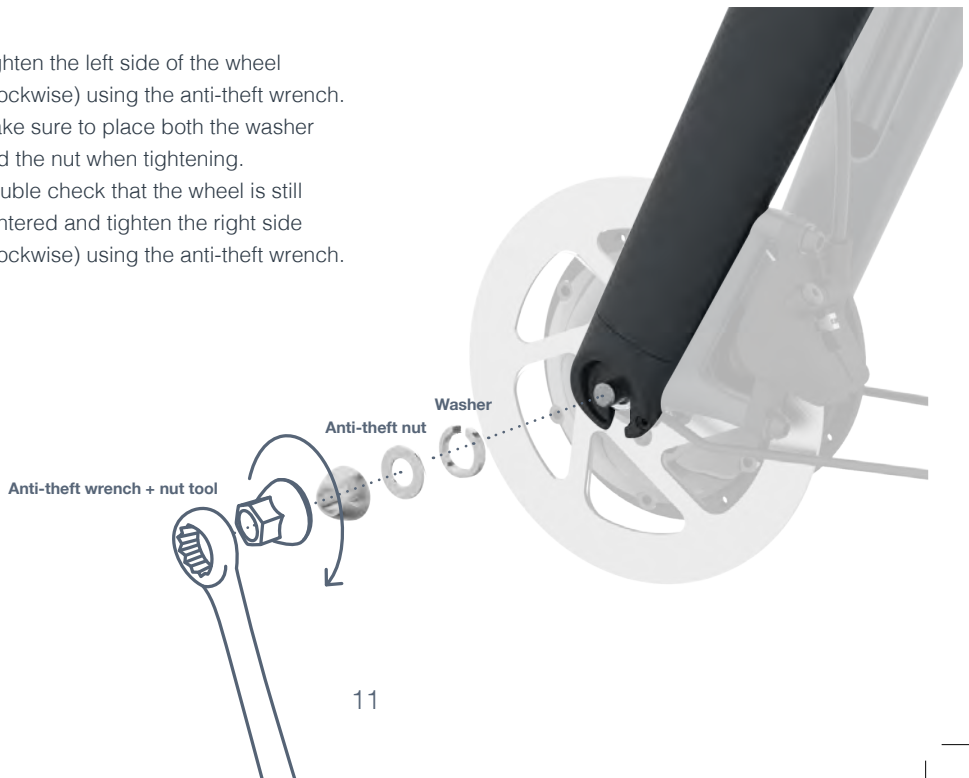


## 6. Brake disc alignment

- 6.1** The brake disc should be aligned with the brake calliper pads, with room for the wheel to spin freely.



- 6.2** Tighten the left side of the wheel (clockwise) using the anti-theft wrench. Make sure to place both the washer and the nut when tightening.
- 6.3** Double check that the wheel is still centered and tighten the right side (clockwise) using the anti-theft wrench.

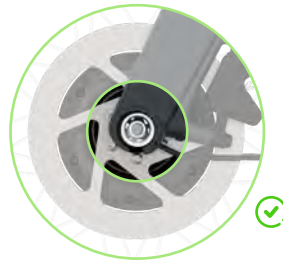


## 7. Wheel alignment

- 7.1** Check both sides of the front fork dropout to see if the installation is correct, the anti-theft nut should sit in the center of the dropout.



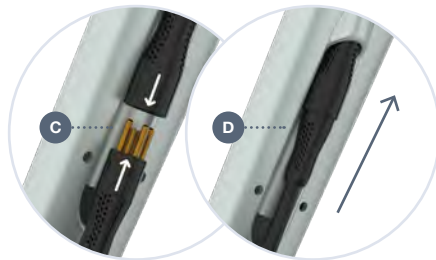
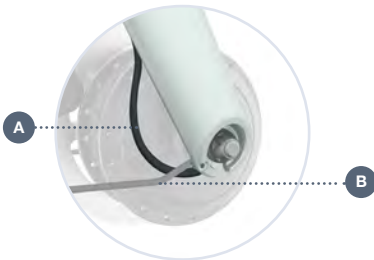
Installation incorrect



Installation correct

## 8. Connect the motor cable

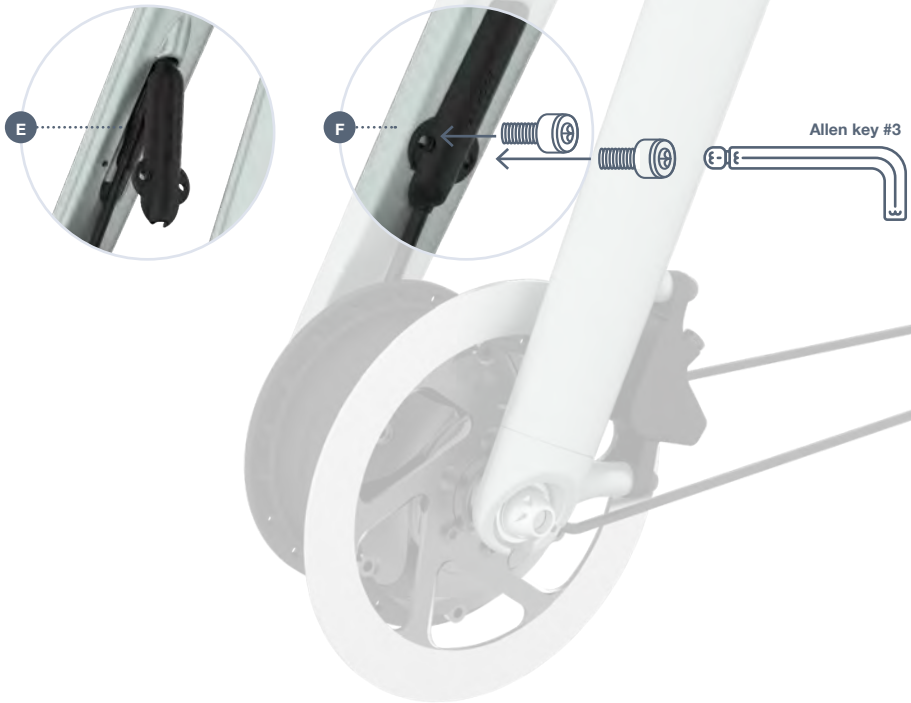
- 8.1** Make sure that the motor cable (A) runs between the motor and fender stay (B).
- 8.2** To connect the motor cable, both arrows should be aligned (C). Then, tuck the motor cable into the front fork as far as possible (D).



- 8.3** Slide the motor cable cover in the opening (E), and tighten the two bolts with Allen key #3 (F).

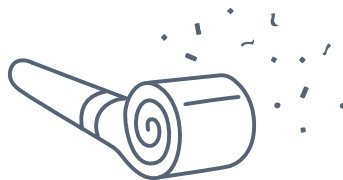
**Tip**

Use the round side on the long end of Allen key #3 in order to mount the screws from an angle



**Congratulations!**

That was the hardest part – take a moment to celebrate.



## 9. Attach the pedals

**9.1** Identify the left pedal – Looking down from a riders position it's attached to the left side of the bike and has an engraved 'L'.

**9.2** Screw onto the left crank by hand in an **anticlockwise** direction.

**9.3** Tighten the pedal using Allen key #6.



## BUILD YOUR BIKE

- 9.4** Identify the right pedal – Looking down from a riders position it's attached to the right side of the bike and has an engraved 'R'.



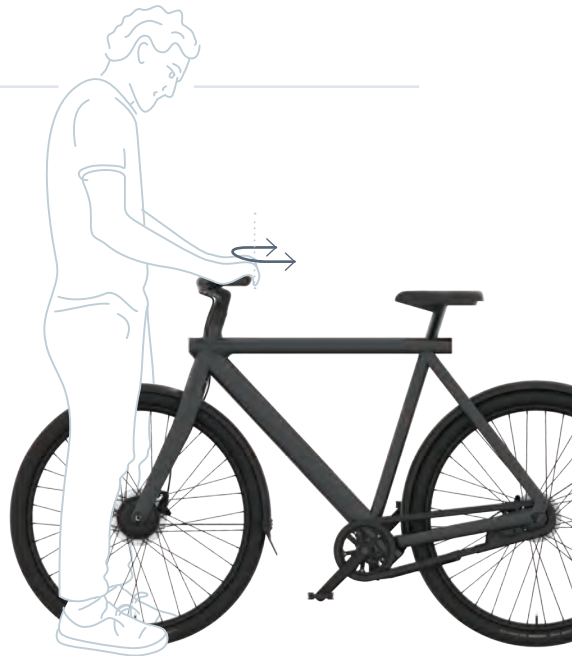
- 9.5** Screw onto the right crank by hand in a **clockwise** direction.

- 9.6** Tighten the pedal using Allen key #6.



## 10. Check your handlebar

- 10.1** Hold the front wheel between your knees and try to rotate the handlebar. If you can feel any play, use Allen key #5 to secure the handlebar.





# The first ride

---

Ready for take off? Here's how to get the most from your new Electrified.

---

Matrix Display  
Inflate your tires  
Activating your Electrified  
Handlebar buttons  
Locking your bike  
Unlocking when connected

Unlocking when not connected  
Power assist level  
Controlling the lights  
Power and reset  
Charging



## THE FIRST RIDE



**When charging,** a lightning bolt will appear on the Matrix Display.



**While riding,** you'll see your speed, gear, and current battery level.



**When stationary,** you'll see the standby icon – time to get moving!



**When changing settings,** the Matrix Display will show what you're currently adjusting.



**The alarm** will be activated if anyone tampers with your bike.



**If something goes wrong,** an error message will appear.

## THE FIRST RIDE

### 1. Inflate your tires

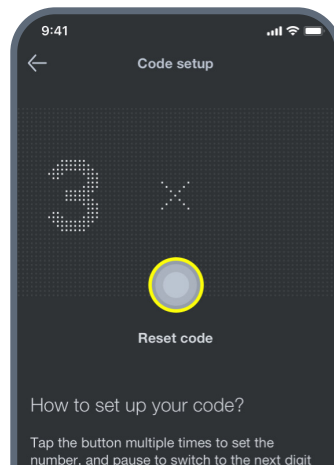
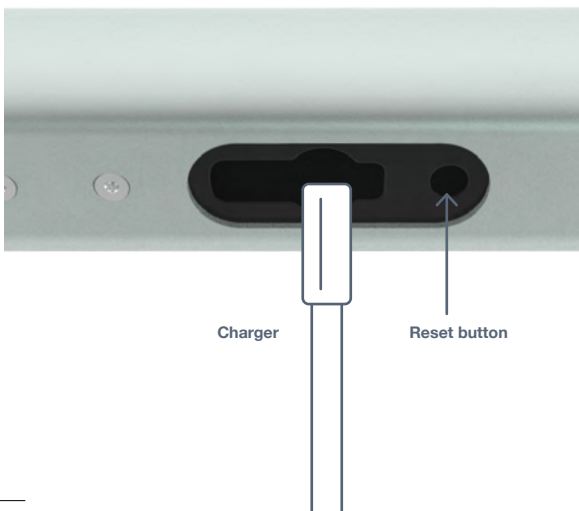
- 1.1** Using the included pump, inflate your tires to 2.5 - 3.5 Bar / 50 Psi (the recommended pressure is printed on the tires, if you need a reminder).



### 2. Activating your Electrified

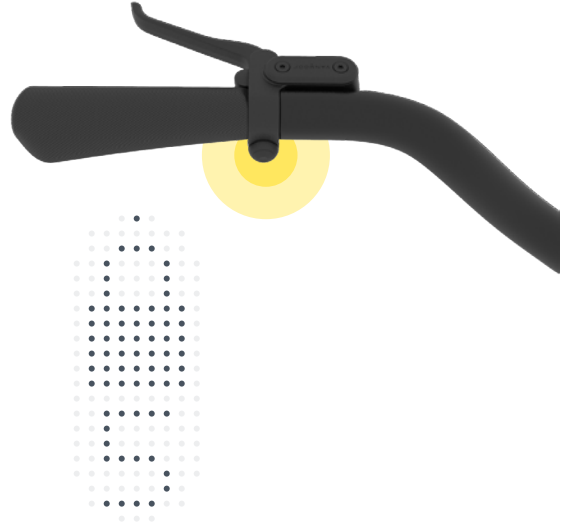
- 2.1** Before you ride your bike, you'll have to get it out of shipping mode. To do this, insert the charging plug or press the reset button (see page 24 for charging information).

- 2.2** Open the VanMoof app to create an account and register the bike (if you haven't already). The app will connect automatically, and guide you through setting your personal unlock code (see page 20 for unlock code information). If connection fails, check if your phone is near the bike and Bluetooth is enabled.



### 3. The left handlebar button

- 3.1 **When riding**, this button will sound the bell.
- 3.2 **When the app isn't connected and the bike is locked**, a long press will prompt you to enter your unlock code.
- 3.3 **When the app is connected and the bike is locked**, a short press will unlock your bike – make sure Touch Unlock is enabled in the app.
- 3.4 **When standing still and the bike is unlocked**, the bike will enter standby mode after five minutes – press this button to wake up the bike.



### 4. The right handlebar button

- 4.1 **When riding**, this button activates the Turbo Boost. The Turbo Boost increases the pedal assist power for as long as you hold the button, helping you to accelerate quickly.
- 4.2 **When standing still**, press and hold this button to cycle through power assist levels.



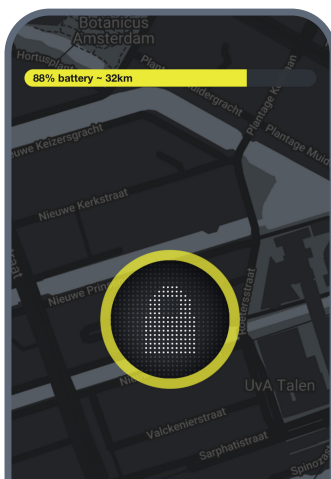
## 5. Locking your bike

- 5.1** To lock your bike, align the stripe on the chainguard with a stripe on the rear hub.
- 5.2** Gently kick the Kick Lock button near the left rear dropout. You'll hear a locking sound, and the rear wheel will be immobilized.
- 5.3** If the alarm is activated in the app, locking the bike will automatically arm the alarm. Unlock your bike to disarm the alarm.

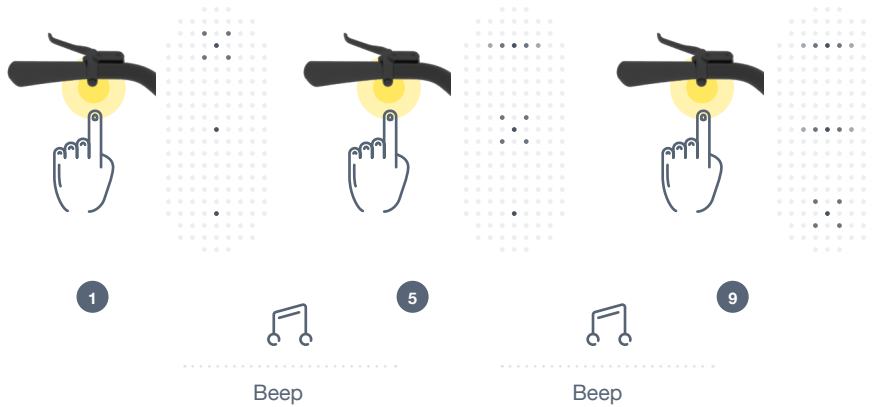


## 6. Unlocking when connected

- 6.1** When your phone is connected to your bike, press the unlock icon in the app to unlock your Electrified. A five-second timer will appear on the Matrix Display of your bike, and you'll hear a ticking sound – move the bike forwards or backward to release the wheel.
- 6.2** If Touch Unlock is activated in the app, just press the left handlebar button to unlock your Electrified. A five-second timer will appear on the Matrix Display, and you'll hear a ticking sound – move the bike forwards or backward to release the wheel.



## 7. Using your unlock code



### 7.1 Let's say your code is 1-5-9. Here's what to do:

- Hold the left handlebar button – this will switch to the personal code unlock mode.
- Enter the first digit of your code – in the example above that means pushing the button 1 time. You'll hear a beep as confirmation.
- Enter the second digit of your code – pushing the button another 5 times. You'll hear a beep again.
- Enter the third digit of your code – pushing the button 9 times. You'll hear a final beep.
- After the last confirmation, move your bike forwards or backwards within 5 seconds – now you're ready to ride.

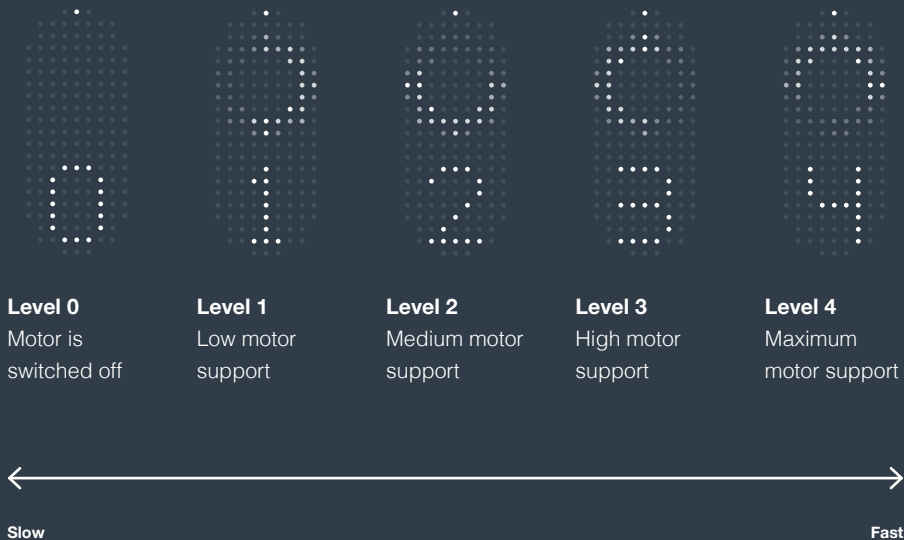


## 8. Power assist level

- 8.1** When the bike isn't moving, press and hold the right handlebar button to cycle through the power assist levels. Release the button to select the level.
- 8.2** You can also change power assist levels in the app, when it's connected to the bike.
- 8.3** The motor will deliver power intelligently depending on your current speed.
- 8.4** The motor will only engage while the pedals are turning. Stop pedalling to slow down.
- 8.5** Your maximum speed depends on local regulations – you'll be prompted to choose your country in the VanMoof app.

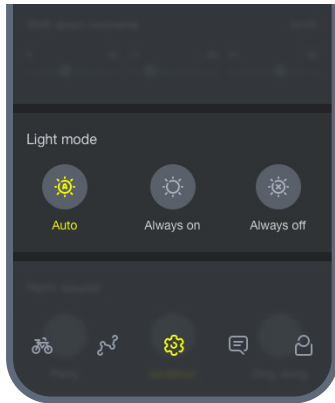
### Note

Your choice of power assist level will affect the maximum distance you can ride. A lower level will provide less support, but allow you to ride further. Higher levels will provide more support, but you'll need to charge your bike sooner.



## 9. Controlling the lights

**9.1** Open the VanMoof app to control the front and rear lights.



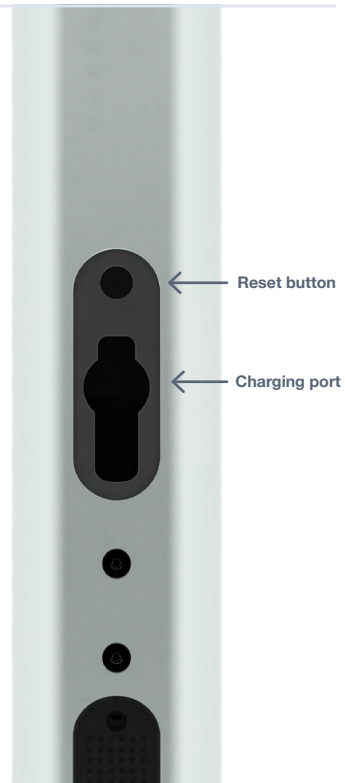
**9.2** We recommend the Auto setting – the bike will automatically activate the lights when it gets dark.



## 10. Power and reset

**10.1 To power your bike on and off** (when unlocked), press either one of the handlebar buttons or the reset button once to power the bike on.

**10.2 To reset your bike**, press and hold the button on the underside of the top tube next to the charging port for eight seconds. You'll hear your bike resetting. Your bike has now been reset. Press either handlebar button to power the bike on and use as normal.





## 11. Charging

**11.1** Open the rubber cover and gently insert the charging plug in the charging port. When fully charged, the LED on the charger will change from red to green. It takes about five hours to fully charge the battery.

**Follow these simple tips to keep your battery running in perfect condition for longer:**

- Only use the official VanMoof battery charger.
- Charge the Electrified indoors, in a well-ventilated dry location (moisture and extreme temperature fluctuations can affect the charging process).
- The bike will charge best at temperatures between 0 - 30°C (32 - 86°F).
- Place the charger on a hard surface and make sure it is never covered. Never place it on carpet or textile surface.
- Always keep the plug and connector free of dirt and moisture.
- Do not charge your bike if the charger or plug is damaged. If in doubt, contact us immediately.
- If you don't plan to use your Electrified for a long period of time, make sure the battery gets a full charge cycle every six months.





# Find your fit

---

Comfort is king – here's how to tweak your bike for the perfect ride.

---

Saddle adjustment

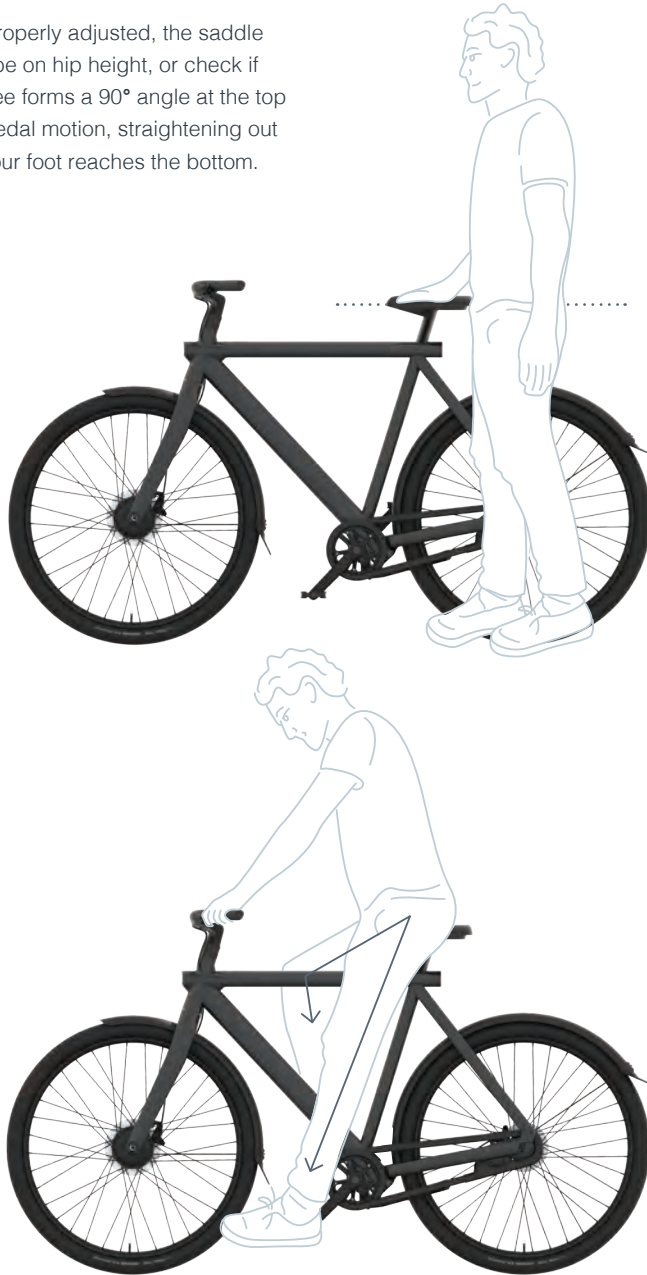
Adjusting the handlebar height

## FIND YOUR FIT

### 1. Saddle adjustment

---

- 1.1** When properly adjusted, the saddle should be on hip height, or check if your knee forms a 90° angle at the top of the pedal motion, straightening out when your foot reaches the bottom.



## FIND YOUR FIT

- 1.2** Adjust the saddle height by inserting anti-theft Torx key T30 and turning it clockwise. You can then slide the seat post up and down.

- 1.3** Make sure you don't exceed the maximum saddle height, indicated on the seat post.



- 1.4** Change the saddle position by inserting anti-theft Torx key T30 into the two openings. Loosen both bolts, and then slide the seat to your preferred position.



## FIND YOUR FIT

### 2. Adjusting the handle bar height

- 2.1** First, loosen the bolts on the side of the handlebar using the Allen key #5.



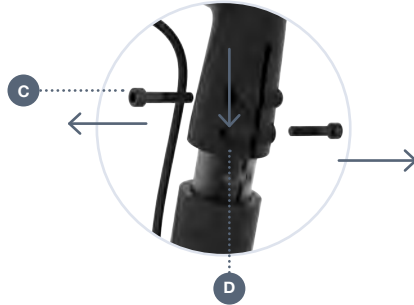
- 2.2** Lift it up to the top of the internal stem, then tighten one of the bolts to keep it in position. Be careful to not detach the handlebar completely.

- 2.3** Place together enough spacers to raise the handlebar to your preferred height (A). Then slide them down (B).

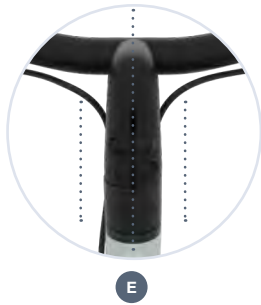


## FIND YOUR FIT

- 2.4** Loosen the bolt (C) and gently slide the handlebar down (D).



- 2.5** Check that the height for comfort, and make sure the stem is in line with the front wheel (E). Tighten both bolts to secure the handlebar position (F).





# Love your bike

---

Our bikes are built to last, but they still appreciate a little maintenance every now and then.

---

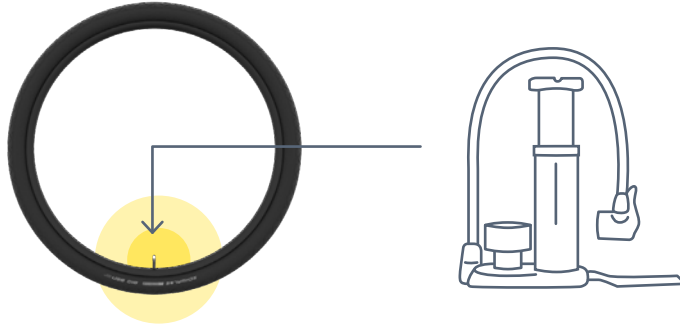
Bike basics  
Chainguard and cleaning  
Screw connections

Replacing parts  
Warnings  
Warranty

## Bike basics

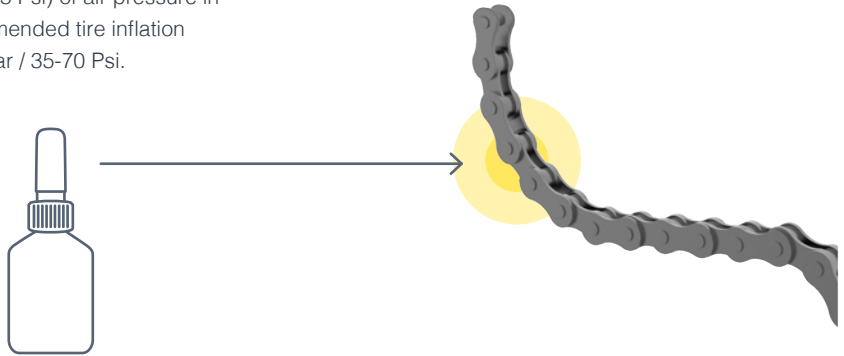
---

These two simple tips will keep your bike riding happier, for longer.



### **Pump your tires**

You'll be 15% more energy-efficient by keeping 3,0 Bar (35 Psi) of air pressure in your tires. Recommended tire inflation pressure: 2.5- 5 Bar / 35-70 Psi.



### **Lubricate your chain**

Apply a little lube to your chain every now and then to keep it running smoothly.

## Chain guard and cleaning

Clean your bike frame using water and gentle detergent. We do not recommend using pressure washers, as this can damage the internal electronics.



Your S3 or X3 is fitted with an enclosed chainguard to protect it from dirt. In the rare case where dirt goes inside, remove the chainguard and clean the chain by rubbing it with an oily cloth. It also comes with a chain tensioner that is designed to ensure the chain doesn't need to be tensioned during the first 2 years after purchase.

## Screw connections

It's very important that all bolted connections are secured with the correct torque.

Too much torque can damage the screw, nut or component. Always use the supplied torque spanner to tighten screw joints.

Component	Torque
Stem clamp - handlebar	7Nm
Headset stop-screw-handlebar	6Nm
Seat clamp frame screw	10Nm
Seat/saddle angle screw	10.5Nm
Front wheel axle	30Nm
Rear wheel axle	30Nm
Motor cable cap	2Nm
Pedals	40Nm



## Replacing parts

In the certification process, specific components are defined which are allowed to be used on your VanMoof. In other words the certification only applies if your vehicle uses these parts or replacement parts that have been approved for your model.

If parts are replaced by the user, only original parts or replacements, approved for this bicycle model by VanMoof, may be used. Otherwise the user needs to seek individual permission from local regulatory authorities.

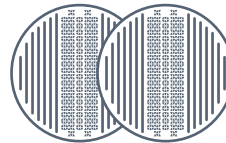
### Parts which must only be replaced with approved components:

1. Frame	11. Kickstand
2. Fork	12. Handlebars
3. Motor	13. Seat post and saddle
4. Battery	14. Mudguards
5. Electronic system	15. Pedals
6. Tires	16. Lock
7. Rims	17. Grips
8. Brake system	18. Chainguard
9. Front light	19. Chain
10. Rear light	

### Compatible accessories

Without additional accessories, the VanMoof S3 & X3 both weigh 19 kg.(41.8 lb) The total weight of VanMoof S3 and X3 (including rider and luggage) should not exceed 120 kg (264.5 lb).

### Accessories Included:



Round reflectors



Wheel reflectors

## Warranty

VanMoof guarantees each new bicycle frame against defects in workmanship and materials for two years. All original components are also covered by warranty for a period of one year from the date of purchase. This warranty is expressly limited to the replacement of a defective frame, or defective parts and is the sole remedy of the warranty. This warranty applies only to original owners and is not transferable.

Claims under this warranty must be made directly to the place at which you purchased the bike, and proof of purchase is required. This warranty does not cover normal wear and tear, improper assembly or follow-up maintenance, or installation of parts or accessories. The warranty does not apply to damage or failure due to accident, misuse, abuse, or neglect. Modification of the frame or components shall void this warranty. Your local VanMoof retailer shall not be responsible for incidental or consequential damages. Labor charges associated with parts changeovers are not covered by the warranty.

### Disclaimer

Under no circumstances, including, but not limited to negligence, shall VanMoof or any VanMoof distributor (seller) be liable for any damages, including but not limited to special or consequential damages that result from the use of, or the inability to use, the bike and/or any other products or materials referred to in this manual, even if VanMoof has been advised of the possibility of such damages.

Applicable law may not allow the limitation or exclusion of liability or incidental or consequential damages, so the above limitation or exclusion may not apply to you.

## Warnings

- ⚠ **WARNING** Do not touch the disk of the front and rear brake while it is rotating or directly after braking. This could result in injury or burns.
- ⚠ **WARNING** Do not remove the battery, always contact VanMoof regarding any battery issues.
- ⚠ **WARNING** Always ride with care – turning and braking suddenly may cause accidents.
- ⚠ **WARNING** Do not modify or tamper with the bike's motor or integrated computer systems. Modifying the bike in any way will void your warranty and can lead to accidents resulting in injury or death.
- ⚠ **WARNING** The left brake handle controls the front wheel brake. The right brake handle controls the rear wheel brake. In the UK & Japan, the right brake handle controls the front wheel brake. The left brake handle controls the rear wheel brake.
- ⚠ **WARNING** Riding in the city can be hazardous. Failure to wear a helmet when riding may result in serious injury or death.
- ⚠ **WARNING** Never ride with headphones, or talk on the phone while riding.



## LOVE YOUR BIKE

- ⚠ **WARNING** Never ride in a situation where you are not able to fully control the bike.
- ⚠ **WARNING** Take care when riding in wet and slippery conditions. Ride slowly and gently apply force to the brakes to accommodate a longer stopping distance.
- ⚠ **WARNING** Ride at an appropriate speed, in accordance with the terrain, your riding capabilities and local government regulations. Make sure you choose the speed settings for your country when installing the app.
- ⚠ **WARNING** Disk brakes can produce significant stopping power and may behave differently to other bicycle brake systems. Please familiarize yourself with the brakes before your first ride.
- ⚠ **WARNING** Always make sure your lights are working properly and not covered or obscured. We recommend using lights in all conditions for maximum visibility.
- ⚠ **WARNING** This bike is made for riding in the city. Do not use it for racing, mountain biking or for any other form of non-urban cycling. Understand your bike and its intended use; choosing the wrong bicycle for your purpose can be hazardous. Using your bike the wrong way is dangerous.
- ⚠ **WARNING** Under wet and slippery conditions, adjust your way of riding. Ride slower and gently apply force to the breaks earlier as your braking distance is longer.
- ⚠ **WARNING** Inspection and maintenance are important to the safety and longevity of your bicycle. Regularly check the brakes, tires, steering and wheel rims. Any part of a poorly maintained bike can break or malfunction, leading to an accident resulting in serious injury or death.
- ⚠ **WARNING** Your bicycle must comply with your country's legal requirements when riding on public roads in all conditions, including bad weather, night time, dusk or dawn. Many countries require specific safety devices. It is your responsibility to familiarize yourself with the laws of the country where you ride and to comply with all the applicable laws, including properly equipping yourself and your bike as the law requires.
- ⚠ **WARNING** As with all mechanical components, bicycles are subject to wear and tear, as well as high stresses. Different materials and components may fatigue in different ways. Make sure you have replacement parts available for components which are easily worn or damaged, e.g. tires and brake pads. If the design life of a component has been exceeded, it can suddenly fail, possibly causing injuries to the rider. Any form of crack, scratches or change of coloring can indicate that the life span of a component has been reached and that it should be replaced.
- ⚠ **WARNING** Failure to confirm compatibility, properly install, operate and maintain any component or accessory can result in serious injury or death. Do not modify your bike frame or components in any way. Modifications can cause damage leading to an accident that can result in severe injury or death. Incompatible accessories or improper mounting of accessories can adversely affect the performance of your bicycle and may be unsafe.
- ⚠ **WARNING** The A-weighted emission sound pressure level at the driver ears is less than 70db(a).
- ⚠ **WARNING** Please note all product-specific demands for any third party products you add to the bike. Child and baggage carriers add weight and raise the center of gravity, affecting balance and bike handling. If you lose control, you and any child passengers can be severely injured or killed.
- ⚠ **WARNING** If using a child seat with a coiled spring, make sure it is fitted correctly and the spring is covered to avoid potential injury.
- ⚠ **WARNING** Do not fit a child seat to the VanMoof S3 or X3, unless recommended and installed by VanMoof. Doing so may result in injury or death.
- ⚠ **WARNING** The VanMoof S3 and X3 are not suitable for towing trailers of any sort.
- ⚠ **WARNING** This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
  - 1) this device may not cause harmful interference and
  - 2) this device must accept any interference received, including interference that may cause undesired operation of the device.

 **WARNING:**Federal Communications Commission (FCC) Statement

**15.105(B)**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**15.21**

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

**FCC RF RADIATION EXPOSURE STATEMENT:**

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 15 millimeter between the radiator and your body.

